



GUTH

# Mixers



**guth ventile**

FLUID PROCESS GROUP



**DURABLE & GENTLE ON THE PRODUCT**  
Guth mixers

# Contents

AREAS OF APPLICATION	4
MODULAR SYSTEM	5
FEATURES	6
ACCESSORIES	7
INSTALLATION OPTIONS	8
TECHNICAL DATA	10



## AREAS OF APPLICATION

# Mobile mixing sets standards

Our mixers offer you excellent mixing results and a wide range of advantages when mixing liquids with gaseous products. As a mobile version, many tanks and vessels can be served with only one device. Pumping is no longer necessary. Our mixers offer you excellent mixing results and a wide range of advantages when mixing liquids with gaseous products.

Guth Mobile Mixers RA are used for mixing, stirring, distributing and homogenising water-like and medium-viscosity media. They are mainly used in wine and sparkling wine cellars, but also in many other areas of the beverage industry where gentle mixing is required.

**Extreme durability and gentle product mixing with extremely good mixing results** are the classic features of our RA series. This is how mixing problems are solved in the long term.



## APPLICATION

---

- > Stirring of liquid to prevent settling of turbid or solid matter, such as stirring of wine yeast for biological acid degradation
  - > Production of uniform liquid mixtures also with different specific weights
  - > Clarifying and homogenising during blending
  - > Mixing liquids with solid or gaseous products, e. g. for distributing fining agents, sulphurous acid or carbonic acid
  - > Emulsification of sterile preparations and homogenised distillates
  - > Accelerating reactions and dissolving processes, e. g. influencing fermentation by dissolving sugar and sugar solutions
  - > Intensification of the efficiency with heat and cold influence, e. g. uniform liquid penetration in cooling processes
  - > Activation of weak fermentation yeasts
- 

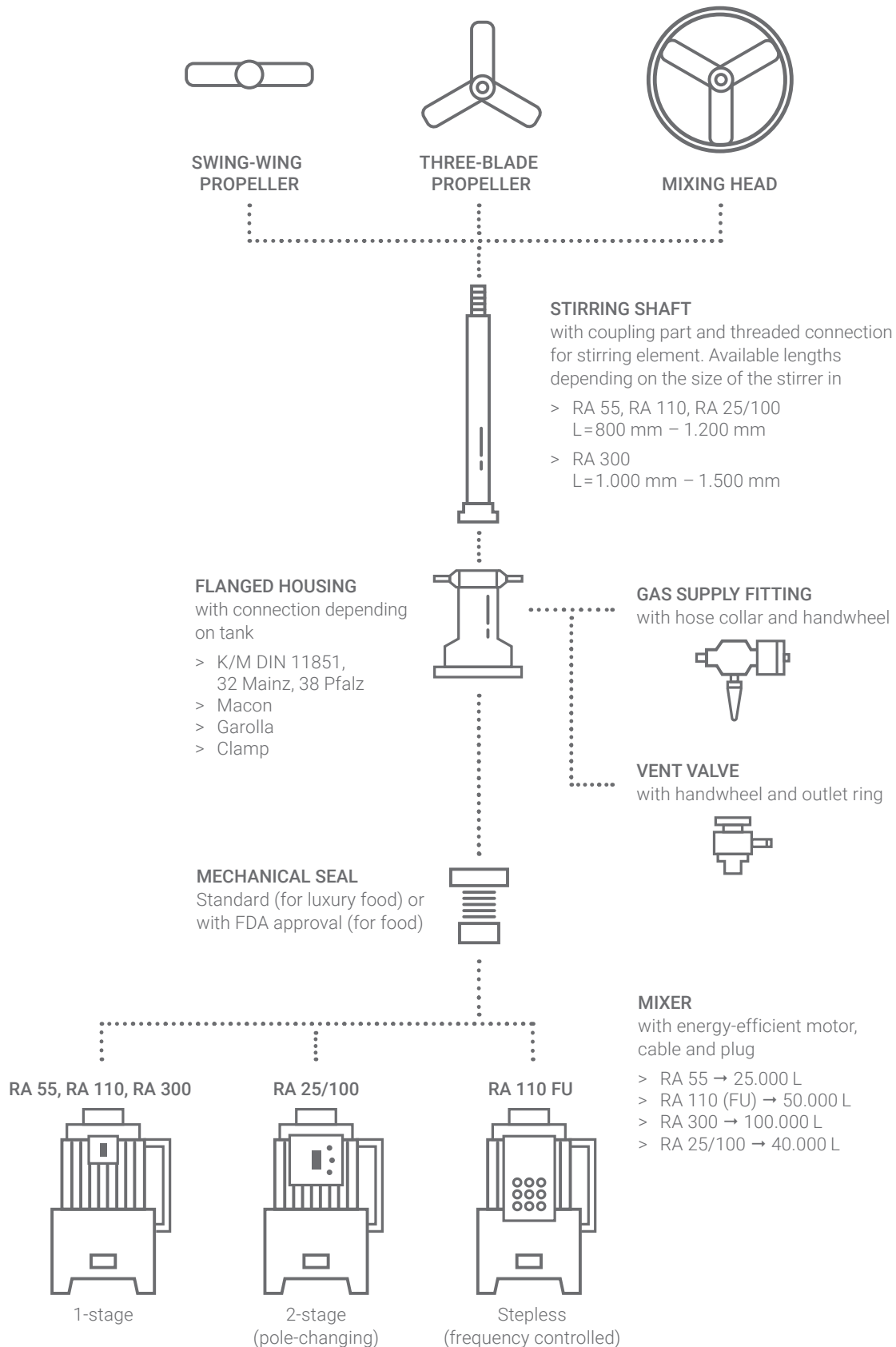
Top: Connection to tank fitting

Middle: Mobile "hanging", shaft & motor horizontal

Bottom: Mobile "overhead", shaft & motor horizontal

## MODULAR SYSTEM

# Modular mixing



## FEATURES

# Everything you need to mix

### Technical features

- > Highly energy-efficient motors according to class IE3
- > Special bearing of the stirring shaft in the hollow shaft of the electric motor
- > Mechanical seals for continuous stress up to up to 10 bar
- > Shock- and impact-resistant special coating of the motors and powder coating of the stand
- > Components in contact with the product made of stainless steel
- > Motor protection switch with undervoltage release and motor protection
- > Connection cable with PUR outer sheath in signal colour orange
- > CEE plug with rubberised recessed grip and nickel-plated contacts



Gas valve (optional)



Connection cable



Frequency converter (optional)

### Special/additional equipment

- > Connecting flange with gas supply valve for stirring in gases & liquids
- > Mechanical seal for aggressive stirring media
- > Frequency converter for individual stirring results



### CUSTOMER BENEFITS

---

- > Low operating costs
  - > Decades of reliability
  - > Vibration-free and quiet running during operation
  - > Safe and ergonomic handling
  - > Assembly and disassembly without liquid or pressure losses
  - > High protection against sulphurous atmosphere
  - > Can be retrofitted with a frequency converter at any time
-

## ACCESSORIES

# One mixer, many possible applications

### Propeller types



**The swing-wing propeller (standard)** is mainly used to allow installation on closed and filled tanks. It is inserted into the tank fitting in a collapsed state and unfolds when the unit is started.



Due to its rigidity, **the three-blade propeller** enables better dissolving of sugar, fining agents and the like in open containers or vats.



**The mixing head** is a three-blade propeller with an additional protective ring. This damage is avoided when stirring in open tanks is avoided.

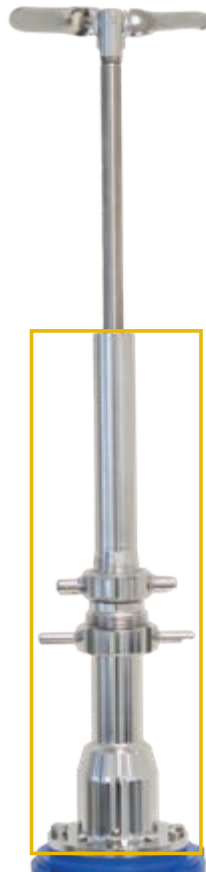
### Gassing device



A special flange housing enables **direct gassing** with sulphur dioxide ( $\text{SO}_2$ ), carbon dioxide ( $\text{CO}_2$ ) and the like with the agitator shaft turning over. This means that the gases to be added to the liquid are intensively mixed as soon as they flow in.

Gas supply valve: DN 10 with hose nozzle  
Material: chrome-nickel steel, highly polished

### Piercing tube



**The piercing tube** with union nut enables the installation of Guth stirrers on flap sleeves and similar fittings without damaging the stirrer shaft during insertion and removal.

Material: chrome-nickel steel, highly polished

### Frequency converter

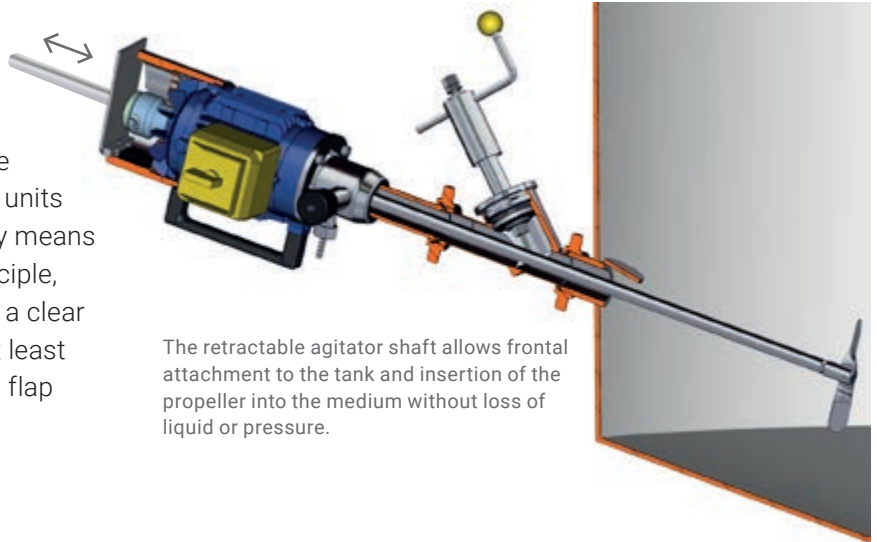


**Frequency converter** with preset speed from 750 to 1500 rpm and integrated Modbus RTU field bus. Lower speeds are also possible by arrangement. Available in housing sizes A from 0.55 – 1.5 kW and size B from 2.2–4.0 kW.

## INSTALLATION OPTIONS

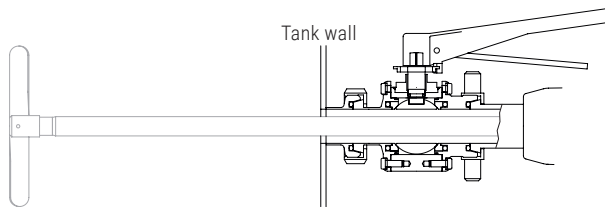
# Mixing Possible for action in the tank

Guth RA stirrers are suitable for flexible connection to various tank fittings. The units are attached to the front of the fitting by means of a threaded screw connection. In principle, all tank fittings with a free passage and a clear nominal and a clear nominal width of at least 32 mm, e. g. ball valve, angle seat valve, flap sleeve and drain gate valve.

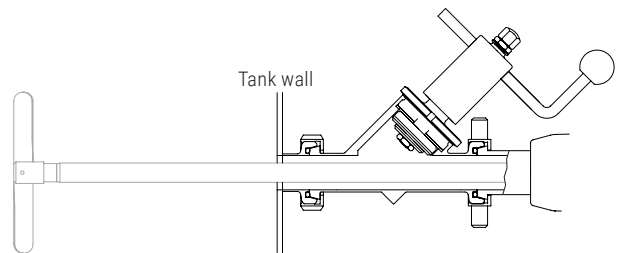


The retractable agitator shaft allows frontal attachment to the tank and insertion of the propeller into the medium without loss of liquid or pressure.

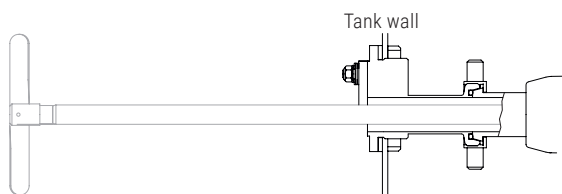
### Installation examples



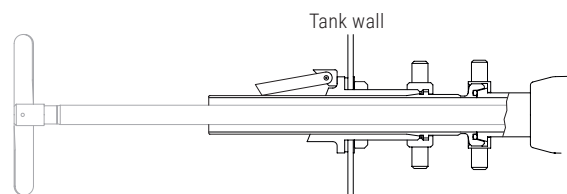
Installation on ball valve



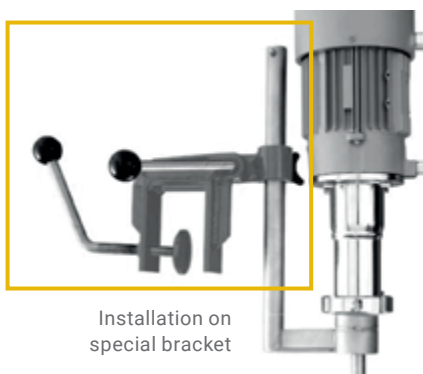
Installation on angle seat valve



Installation on drain gate valve



Installation on the flap sleeve  
(use the piercing tube here to avoid damaging the agitator shaft by the flap resting on it).



Installation on  
special bracket

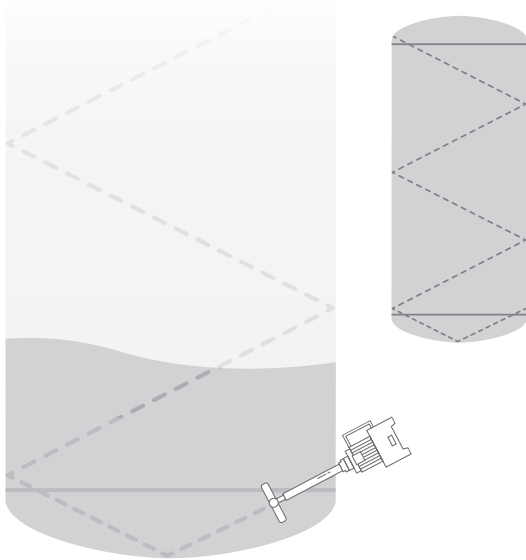
Guth RA stirrers can also be attached to vats and open tanks for dissolving sugar, fining agents and for producing sugar solutions for vertical stirring.

Adjustment options: vertical/immersion angle  
Material: malleable cast iron/brass

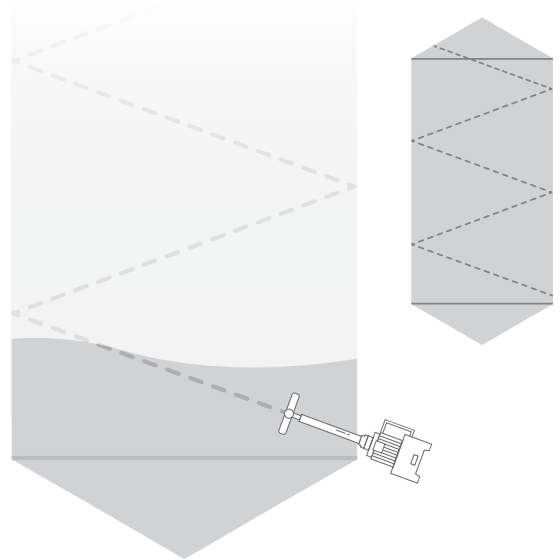


## Installation positions and angles on tanks

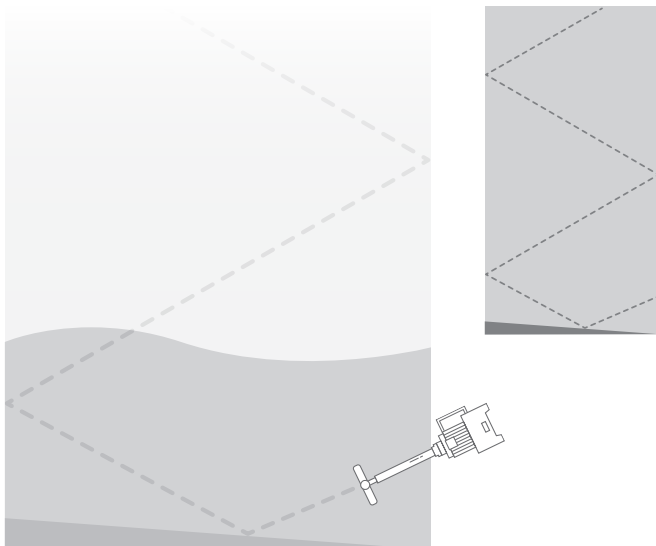
Depending on the tank design, there are different optimum installation positions and angles. We will be happy to help you determine the optimum position for your tank.



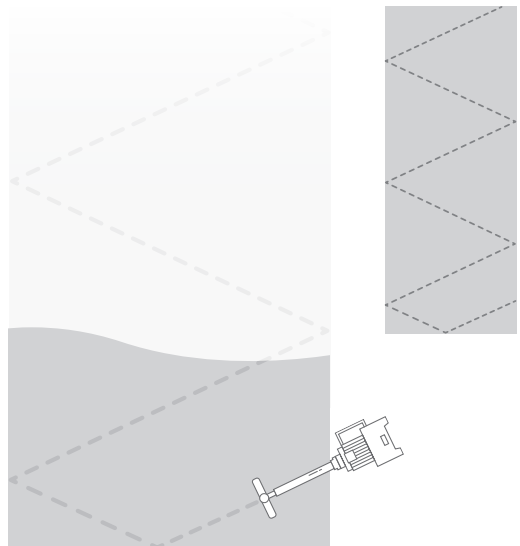
Stirrer on tank with **dished bottom round**



Stirrer on tank with **cone bottom**



Stirrer on tank with **a bottom sloping to one side**



Stirrer on tank with **flat bottom**

## INSTALLATION RECOMMENDATION

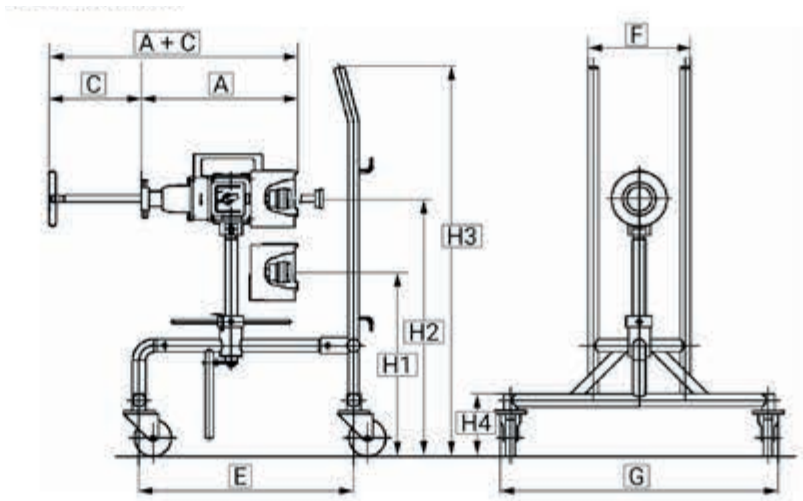


We will be happy to prepare a corresponding installation recommendation for you. When placing your order, please simply provide us with the required details such as tank height, diameter, bottom design, medium, etc.

TECHNICAL DATA

Show size

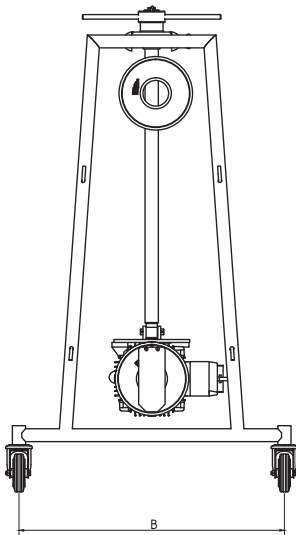
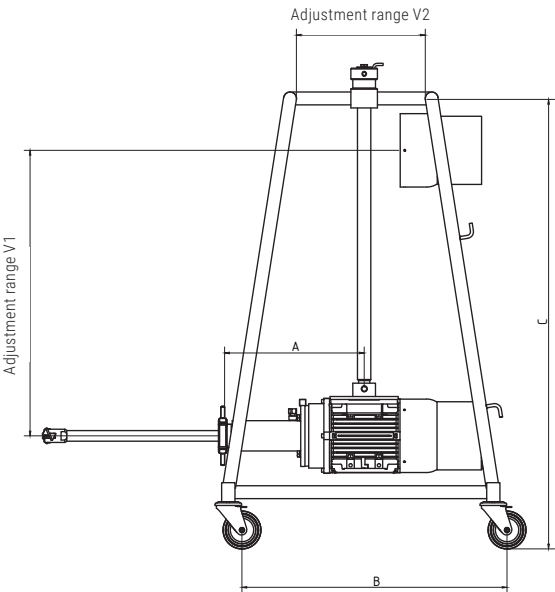
The mobile storage stand supports the stirring device attached to the tank fitting and in use and allows for particularly ergonomic work. For the model RA 300 it is necessary to relieve the connection fitting.



"Surface-mounted" version

RA 55	Size 0	Size 1	Size 2	Size 3	RA 110* RA 25/100	Size 0	Size 1	Size 2	Size 3	RA 300	Size 0	Size 1	Size 2	Size 3
A	425	425	425	425	A	524	524	524	524	A	818	818	818	818
C	425	425	425	425	C	400	400	400	400	C	450	450	450	450
E	445	445	445	650	E	445	445	445	650	E	495	495	495	700
F	270	270	270	270	F	270	270	270	270	F	270	270	270	270
G	500	500	500	700	G	500	500	500	700	G	500	500	500	700
H1	525	575	725	1.025	H1	541	591	741	1.041	H1	550	600	750	1.050
H2	730	780	1.075	1.575	H2	746	796	1.091	1.591	H2	755	805	1.100	1.600
H3	1.050	1.050	1.050	1.050	H3	1.050	1.050	1.050	1.050	H3	1.050	1.050	1.050	1.050
H4	175	175	175	175	H4	175	175	175	175	H4	175	175	175	175

Dimensions in mm.

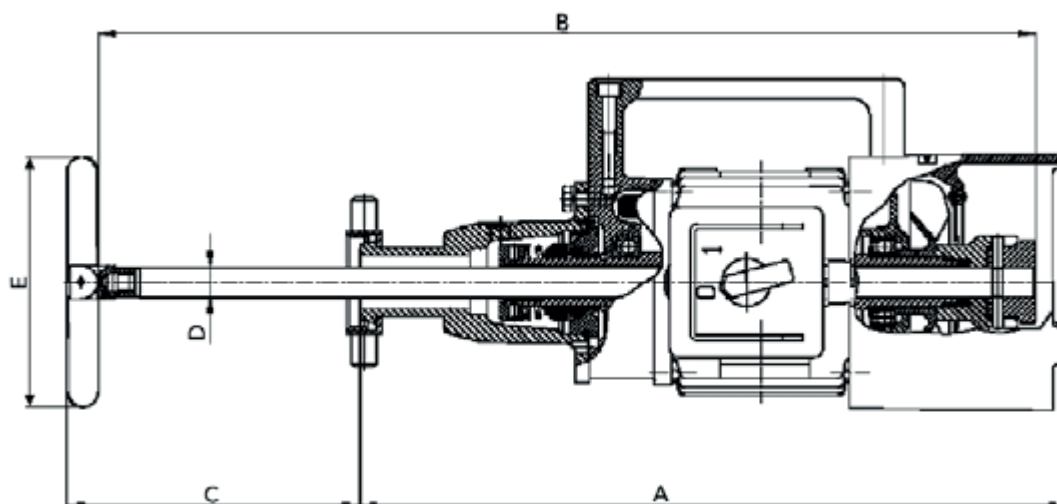


"Hanging" version

We can also manufacture the storage stand in special dimensions on request. Both storage stands are easy to dismountable and thus ideally suited for transport.

Standard-Ausführung	
A	435
B	600
C	1.200
V1	300-1.000
V2	300

V = adjustment range. Dimensions in mm.



		RA 55	RA 110	RA 300	RA 25/100
Tank volume	Lit.	20.000	50.000	100.000	20.000
Power	KW	0,55	1,1	3,0	0,25/1,0
Voltage**	V	110-600	110-600	230-600	400
Frequency	Hz	50/60	50/60	50/60	50
Rounds p. m.	R/min	1.400/1.700	1.400/1.700	1.450/1.750	750/1.500
Weight	Kg	16	27	42	23,5
Standard construction length (mm)	A	440	475	675	475
Shaft*** (mm) Max. length 1.200 mm	B	800	800	1.000	800
	C	425	400	450	400
	D	18	18	28	18
Propeller (mm)	E	Ø150/125 X25	Ø175/155 X30	Ø224/210 X35	Ø155 X30

\*\* Special voltage on request. \*\*\* Special length on request.

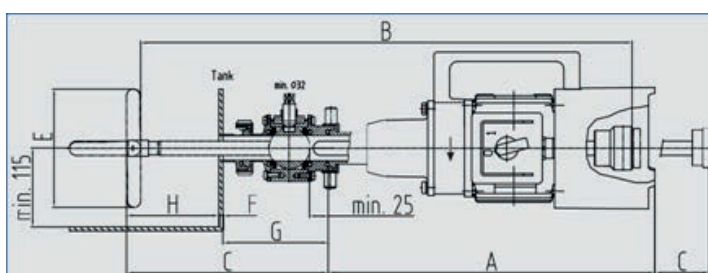
Special motors, special connections, extended rotary shafts and extended cables are possible for all RA units.

## Design information

The part of the wavelength H projecting into the tank liquid should be at least 150 mm.

Total wavelength:

$B_{min} = A + F + H (150 \text{ mm}) + G$  (fitting length tank fitting). Particularly for tanks with concrete walls as well as for fittings with large length, an extension of the shaft is recommended.





### Available brochures:

- > Range overview
- > Butterfly valves
- > High-pressure butterfly valves
- > Two-way diverter valves
- > Double-seat valves
- > Control valves
- > KI-TOP
- > **Mixers**



### Our online product catalogue

Stainless steel valves and fluid power accessories easily and quickly accessible. The Guth catalogue with more than 6,000 items: [www.guth-vt.de](http://www.guth-vt.de)

**Guth Ventiltechnik GmbH**  
 Im Niedersand 52  
 76877 Offenbach an der Queich  
 +49 6348 23801-0  
[sales@guth-vt.de](mailto:sales@guth-vt.de)  
[www.guth-vt.de](http://www.guth-vt.de)

  
**guth ventile**  
 FLUID PROCESS GROUP